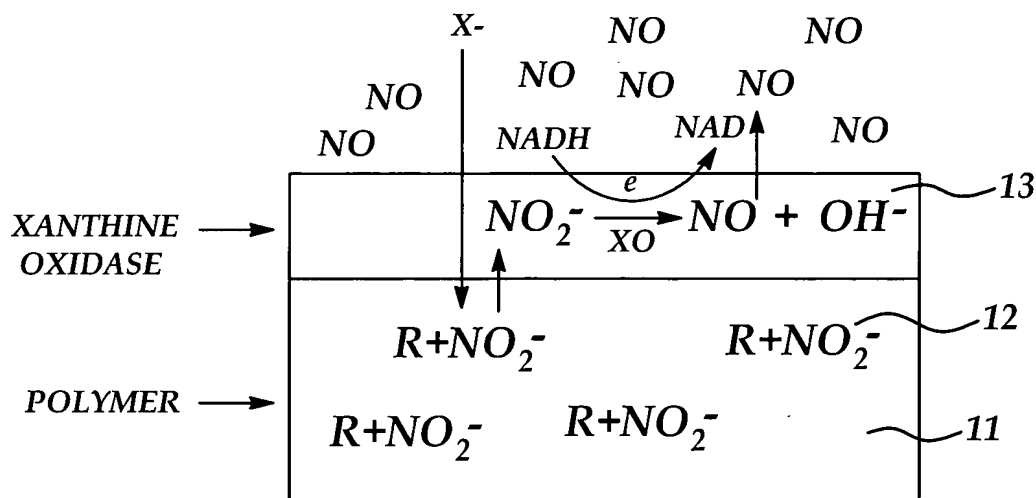




1/4

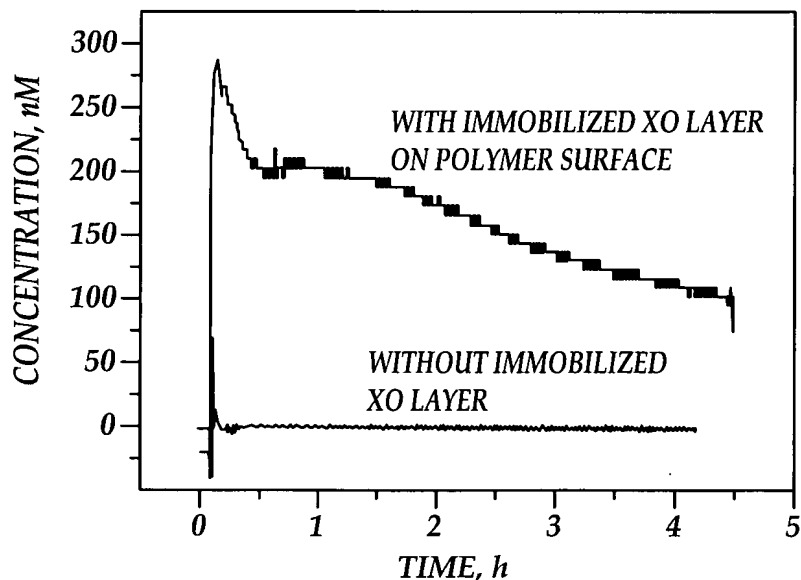
SCHEMATIC OF SURFACE NO GENERATION VIA
 NITRITE REDUCTASE ACTIVITY AND
 POLYMER LOADED WITH NITRITE SALT



R= TRIDODECYLMETHYLAMMONIUM

Figure 1

NO RELEASING PROFILE FROM NITRITE ION-PAIR
 DOPED POLYMER FILMS IN SHEEP BLOOD

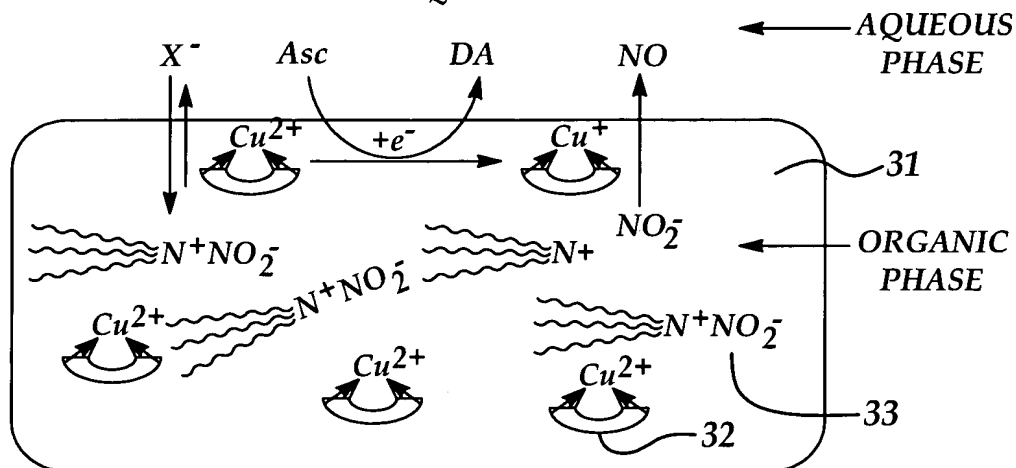


*DISTANCE BETWEEN POLYMER SURFACE
 AND SENSOR IS 10 μm

Figure 2

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ELECTRON TRANSFER FROM AQUEOUS TO ORGANIC PHASE



ASC: ASCORBATE, DA: DEHYDROASCORBATE, X^- : ANION

Cu^{2+} : LIPOPHILIC COPPER COMPLEX

Figure 3

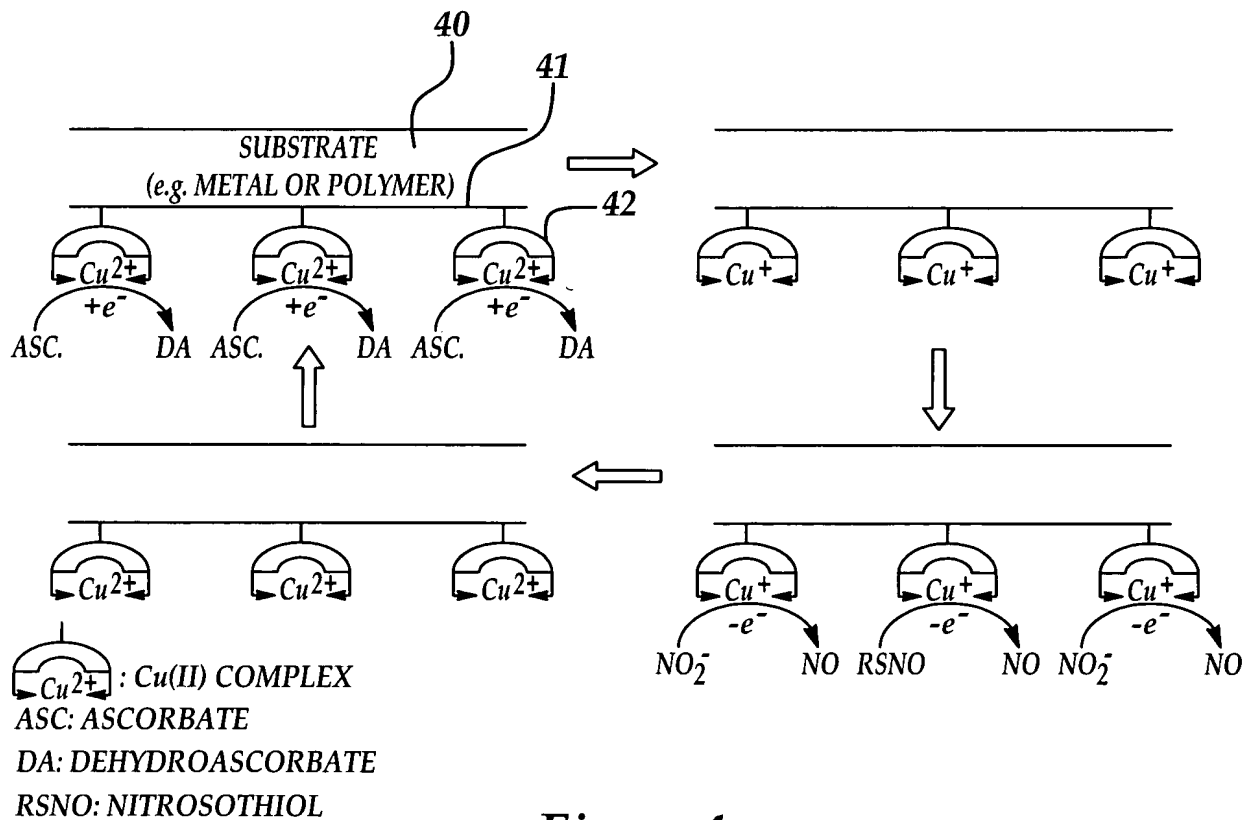
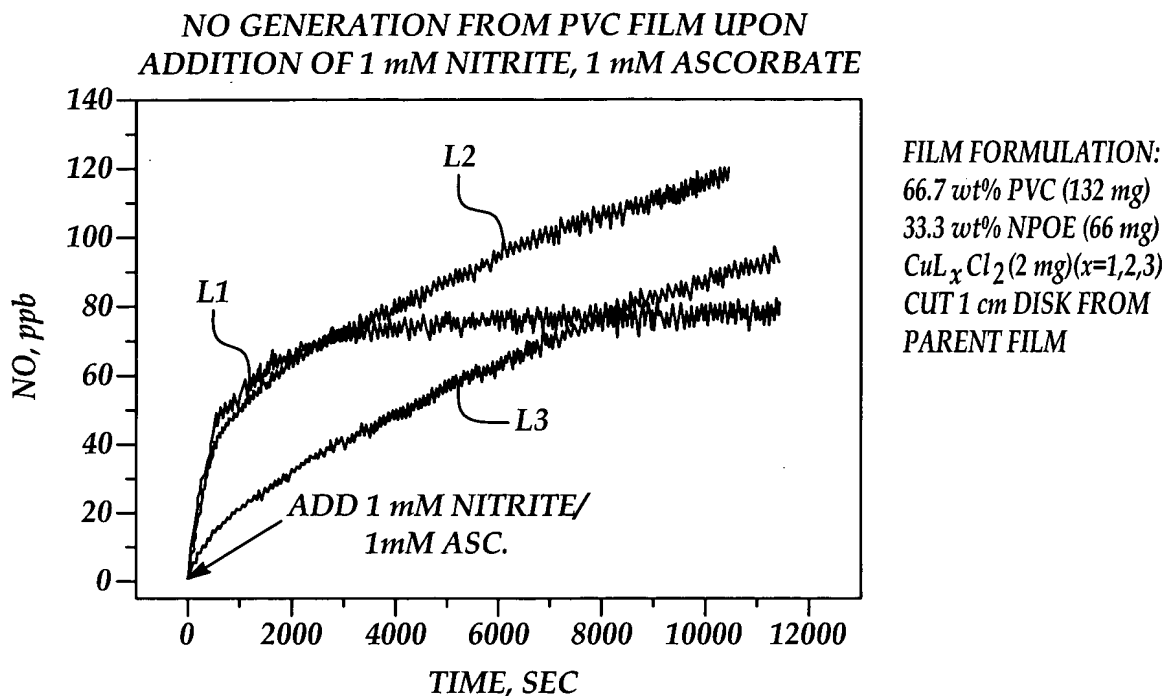


Figure 4



BACKGROUND SOLUTION: DEOXYGENATED PBS SOLUTION pH 7.4

Figure 5

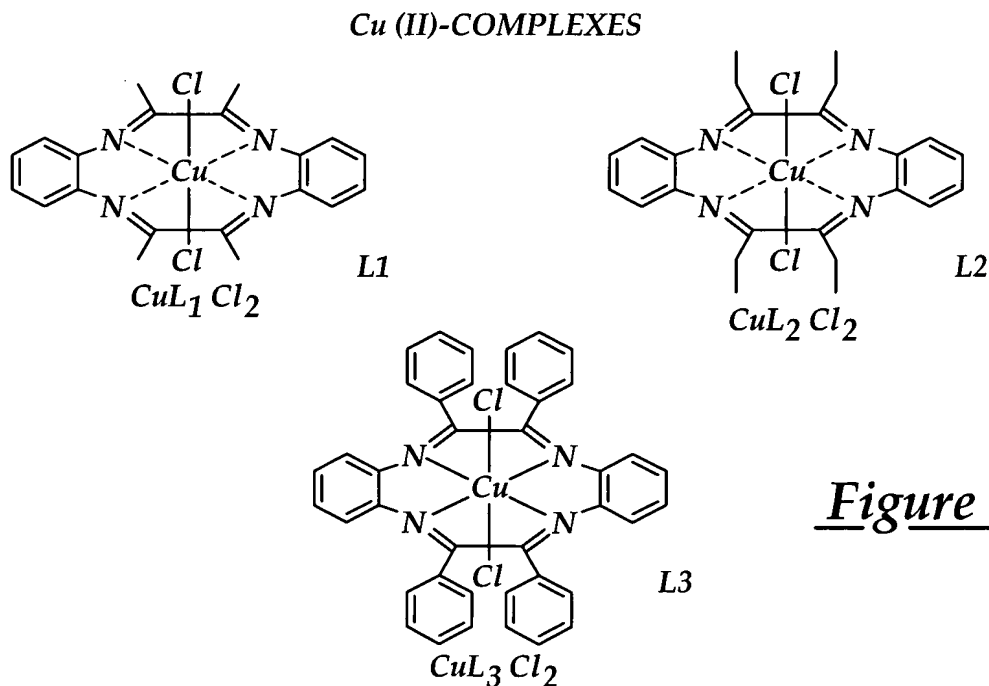
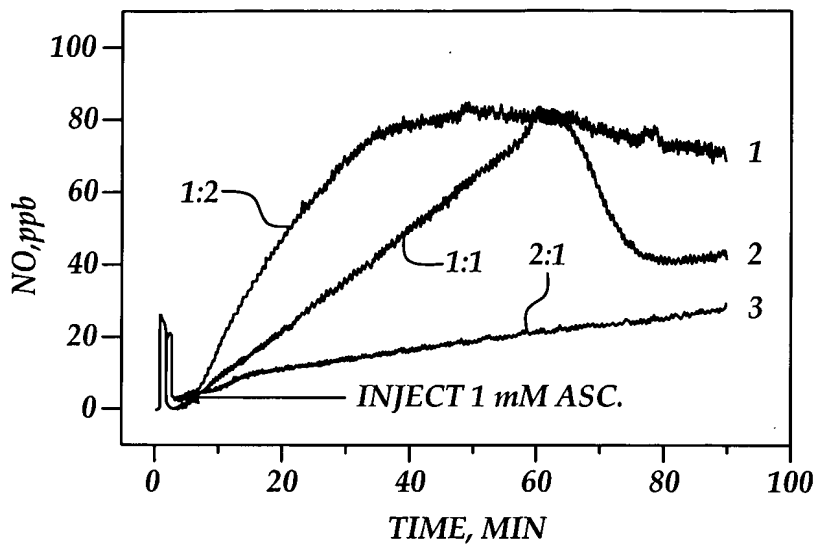


Figure 6

**NO GENERATION FROM NITRITE ION PAIR/ Cu(II) -COMPLEX(L2)
DOPED PVC FILM UPON ADDITION OF 1 mM ASCORBATE**



BACKGROUND SOLUTION:
DEOXYGENATED PBS, pH = 7.4

Figure 7

FILM COMPOSITIONS

1 : 66 mg PVC
132 mg NPOE
4 mg Cu(II) -COMPLEX
20 mg ION PAIR

2 : 100 mg PVC
100 mg NPOE
4 mg Cu(II) -COMPLEX
20 mg ION-PAIR

3 : 132 mg PVC
66 mg NPOE
4 mg Cu(II) -COMPLEX
20 mg ION-PAIR

* EACH FILM CONTAINS
1.0 mg OF TDMA + NO_2^-